

Claims:

1. A rotary engine comprising:

a cylindrical housing (2) having an intake chamber
5 (32) and an exhaust chamber (34) formed at the inner wall
thereof, the intake and exhaust chambers being caved in the
inner wall of the housing;

a guiding member (26) disposed at the center of the
housing(2), the guiding member (26) being formed in a semi-
10 elliptical shape at intake and compression sections and in a
semicircular shape at an exhaust section;

a rotary member (6) disposed in the housing (2) such
that the rotary member (6) can be rotated along with a
rotating shaft (4);

15 pistons (12) disposed in a plurality of operating
chambers (8) formed at the rotary member (6) such that the
pistons (12) can be rotated about shaft rods (58),
respectively, each of the pistons (12) having a tail part
contacting the outer circumference of the guiding member (26);

20 shutoff valves (16) engaged in a guide groove (50)
formed at the housing (2) through guide rods inserted
through intake/exhaust ports (14) formed at the operating
chambers (8) of the rotary member (6);

25 an ignition plug disposed at the inlet of the exhaust
chamber of the housing or at the intake/exhaust ports of the
rotary member; and

shutoff plates (18) rotatably disposed at the outsides of the intake/exhaust ports (14) of the rotary member (6), respectively, the shutoff plates (18) being engaged in the guide groove (50) of the housing (2) through guide rods.

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2. The engine as set forth in claim 1, further comprising oil seals (28, 30) surrounding the intake chamber (32) and the exhaust chamber (34) of the housing (2), respectively.

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3. The engine as set forth in claim 2, wherein the oil seals (28, 30) comprise sealing parts (40, 42) and plate springs (44, 46), both sides of the sealing parts (40, 42) being separable from the housing body of the housing (2).

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4. The engine as set forth in claim 1, further comprising oil seals (74) arranged around the intake/exhaust ports (14) formed at the operating chambers (8) of the rotary member (6), respectively.

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5. The engine as set forth in claim 1, wherein each of the shutoff valves (16) for opening or closing the intake/exhaust ports (14) of the rotary member (6) comprises: a rod-shaped body; a passage (64) formed at one side of the rod-shaped body; and guide rods (66, 68) eccentrically formed at both ends of the rod-shaped body.

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6. The engine as set forth in claim 1, wherein the pistons (12) are constructed such that guide rollers of guiding pieces (10) connected to shaft rods (58) of the pistons (12) contact the sidewall of an elliptical guide groove (48) formed at the housing (2).

7. (cancelled)

8. The engine as set forth in claim 1, wherein the operating chambers (80) of the rotary member (60) have air-supplying channels (22) that can be opened or closed by shutoff valves (20), respectively.

9. The engine as set forth in claim 8, wherein each of the shutoff valves (20) for opening or closing the air-supplying channels (22) comprises: a passage (91) formed at one side of a rod-shaped body thereof; and guide rods (92, 94) eccentrically formed at both ends of the rod-shaped body, the guide rods (92, 94) being engaged in a guide groove (52) formed at the housing (2).

AMENDED SHEET (ART. 34)